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State of Illinois  
Rod R. Blagojevich, Governor



Department of Employment Security  
James P. Sledge, Director

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# Guide To Career Choices

## Information Technology

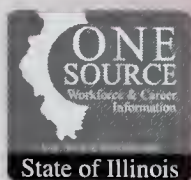
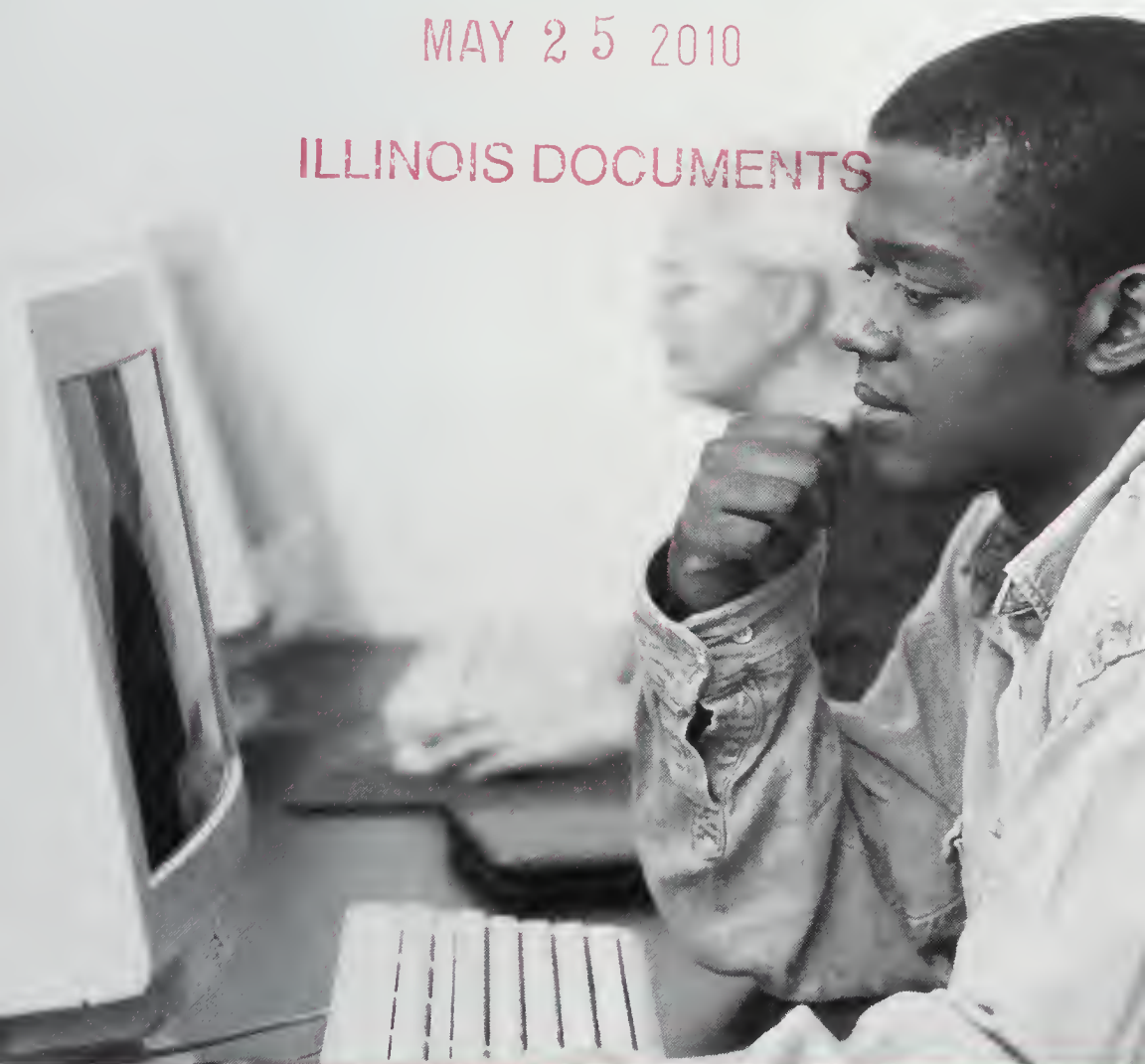
*A brief look at:*

- jobs
- education and training requirements
- wages
- outlook

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[www.ILWorkInfo.com](http://www.ILWorkInfo.com)

ENTRY : the mean (average) of the bottom third of wages in an occupation

MEDIAN : half of the workers in the occupation earn more than this wage; half earn less

EXPERIENCED : the mean of the top two-thirds of wages in an occupation

HS : High School diploma or equivalent

AD : Associate Degree of Arts/Science  
community college, 2 years

BA/BS : Bachelor of Arts/Science degree  
colleges/universities, 4 years

Career Opportunities	OUTLOOK		ANNUAL WAGES			Education & Training
	2014 Employment	Annual Openings	Entry	Median	Experienced	
Computer Systems Analysts	31,865	1,001	\$52,520	\$73,367	\$87,775	Master's degree is now usually required. BA/BS in accounting, finance, or business are the minimum academic requirement. Many positions may also require five to ten years of experience.
Computer Programmers	21,975	537	\$42,669	\$62,847	\$77,441	Varies from a twenty-week course to a master's and doctoral program in computer science/engineering.
Computer Support Specialists	25,602	660	\$28,445	\$45,067	\$56,873	BS now commonly required. In the absence of a degree, substantial experience or expertise may be needed.
Computer Software Engineers, Systems Software	19,100	685	\$60,674	\$83,693	\$97,686	Most have a BA/BS in computer science or software engineering. As technology changes, attendance at workshops and seminars is required to learn new skills.
Computer Software Engineers, Applications	19,169	692	\$52,519	\$71,991	\$85,884	Most have a BA/BS in computer science or software engineering. As technology changes, attendance at workshops and seminars is required to learn new skills.
Network and Computer Systems Administrators	14,192	438	\$43,162	\$60,072	\$73,113	Most network jobs require at least a BA/BS in computer science or computer engineering. Continuing education is needed to keep up with the latest technology.
Network Systems and Data Communications Analysts	12,738	485	\$40,846	\$65,450	\$79,289	BA/BS in computer or information science is often preferred. Some jobs may require only a two-year degree. Job seekers can improve their chances by participating in internship programs while in school.
Database Administrators	6,348	192	\$41,138	\$64,016	\$78,770	Many employers seek applicants who have a BS in computer or information science or management information services.
Computer, Automated Teller, and Office Machine Repairers	4,546	61	\$25,988	\$37,815	\$45,650	One to two years of electronics training from a vocational school or community college.
Computer Hardware Engineers	1,352	32	\$50,687	\$73,089	\$84,693	A BS in engineering is the standard for entry-level positions, but moving toward a master's degree.
Computer and Information Scientists	850	21	\$54,864	\$84,345	\$105,234	A master's degree or Ph.D. in computer science or engineering is the standard.

Occupational growth rates and job opening data are based on All-Industry projections through the year 2014.

Wage data cover full-time, part-time and seasonal employees but exclude temporary and contractual workers. Wages include commissions and cost-of-living allowances, but exclude overtime and tips.



# *Job Descriptions*

## *Computer and Information Scientists*

Conduct research into fundamental computer and information science as theorists, designers, or inventors.

## *Computer Programmers*

Convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language.

## *Computer Software Engineers, Applications*

Develop, create, and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions.

## *Computer Software Engineers, Systems Software*

Research, design, develop, and test operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computing applications.

## *Computer Support Specialists*

Provide technical assistance to computer system users. Answer questions or resolve computer problems for clients in person, via telephone or from a remote location.

## *Computer Systems Analysts*

Analyze science, engineering, business, and all other data processing problems for application to electronic data processing systems.

## *Database Administrators*

Coordinate changes to computer databases, test and implement the database applying knowledge of database management systems.

## *Network and Computer Systems Administrators*

Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet system or a segment of a network system.

## *Network Systems and Data Communications Analysts*

Analyze, design, test, and evaluate network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet, and other data communications systems.

## *Computer Hardware Engineers*

Research, design, develop, and test computer or computer-related equipment for commercial, industrial, military, or scientific use.

## *Computer, Automated Teller, and Office Machine Repairers*

Repair, maintain, or install computers, word processing systems, automated teller machines, and electronic office machines, such as duplicating and fax machines.

## *What is the job outlook?*

Employment of information technology professionals is expected to grow much faster than the statewide average through 2014, as organizations continue to integrate increasingly sophisticated technology. Job growth will continue to be driven by the continued expansion of the computer system design and related services industry, which is projected to remain a top growth industry despite recent job losses. Job growth will not be as explosive as it was during the past decade as these jobs are increasingly being outsourced overseas. However, rapid growth in most areas of information technology is expected to fuel demand for specialists knowledgeable about network, data, and communications security. Job prospects should be best for college graduates who are up to date with the latest skills and technologies, particularly if they have supplemented their formal education with some relevant work experience.

## *Where can I find more information?*

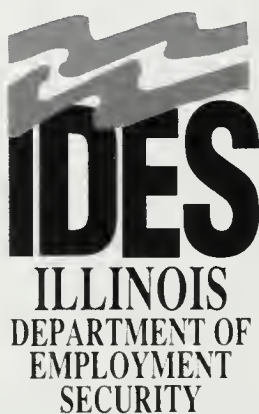
The Illinois Department of Employment Security offers a wealth of information concerning the Illinois labor market. Visit **www.ILWorkInfo.com** to find out more about:

*Career Planning:* **Illinois Career Resource Network**  
1-877-513-1987  
des.icrn@illinois.gov

*Labor Market Information:* **LMI Source**  
1-866-ONE-SRCE (1-866-663-7723)  
des.lmi@illinois.gov

*Workforce Information:* **Workforce Info Center**  
des.workinfo@illinois.gov

For assistance with employment and training issues, contact your local Illinois Employment and Training Center. Call 1-888-367-4382 to find the location nearest you.



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Sources:  
Illinois Department of Employment Security's "Occupational Projections" and "Occupational Employment Statistics Wage Data" and the U.S. Bureau of Labor Statistics' "Occupational Outlook Handbook."

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